

Docket No.: BERTELSHOFER Appl. No.: 10/069,423

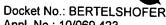
AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW **CHANGES MADE**

Amend the following paragraph(s):

-- FIG. 1 shows a longitudinal section of the configuration of a [0027] tensioner 1 according to the invention. The tensioner 1 includes a housing [[1]] 2 which is secured on the outside via a bracket 3, for example, to an internal combustion engine, not shown in FIG. 1. The housing 2 forms a recess 4 which circumscribes rotationally symmetrically a bearing receptacle 6 and guides, i.a., a torsion spring 7. The bearing receptacle 6 extends from a bottom 5 of the housing 2 over the entire width of the housing 2. The central bore 8 of the bearing receptacle is provided for receiving an axle 9 for rotatably supporting a swivel arm 10 arranged on the side of the housing 2. A rotatable tension roller 28 is arranged on the free end of the swivel arm 10 and disposed upon the traction drive. On the end opposite to the swivel arm 10, the axle 9 is provided with a friction disk 11 which is fitted flush with its end face in a recess 12 of the housing 2 in correspondence with the outer contour of the friction disk 11. At the side of the housing, the friction disk 11 is supported by the housing 2 via a friction lining 13. The torsion spring 7 has spring ends 14, 15, which are positioned in a rotationally fixed manner in the housing 2 and in the swivel arm 10, respectively, and is constructed at the same time as compression spring. This spring configuration generates on the swivel arm 10 a force component which acts in axial direction, with the friction disk 11 being supported simultaneously in force-



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fitting manner by the housing 2. A space 16 is defined in radial direction by the outer contour of the bearing receptacle 6 as well as the torsion spring 7 and receives an elastic insert 17a which fills the space 6 over a partial length of the torsion spring 7. The size of the insert 17a is such that its outer diameter exceeds the inner diameter of the torsion spring 7, when installed. Such a configuration ensures a permanent contact of the insert 17a against the inner contour of the torsion spring 7 and precludes or compensates thereby a disadvantageous characteristic vibration or resonant vibration of the torsion spring 7. The width of the insert 17a ensures a support of the torsion spring 7 in a mid-section "M". The dampening element configured as insert 17a is secured in place by fixing it via a contact surface 18 upon the outer surface area of the bearing receptacle 6 in a non-detachable manner, preferably through gluing .--.



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AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER INDENTIFIERS

(Currently amended) Tensioner (1) for a traction drive, [[in particular a belt drive,]] with a rotationally fixed housing (2) having one end formed with a recess for arrangement of a bearing receptacle (6), for receiving and guiding an axle (9) which is connected to a swivel arm (10) arranged on the side of the housing (2), wherein a rotatable tension roller is arranged on the free end of the swivel arm (10) and disposed upon the traction drive, and a torsion spring (7) in concentric surrounding relationship to the bearing receptacle (6) between the housing (2) and the swivel arm (10) for loading the swivel arm (10) in the direction of an end position and thereby simultaneously axially spreading apart these components, wherein a friction disk (11) is connected to the swivel arm (10) and is urged in forced engagement with the housing (2) for realizing a dampened adjusting movement, characterized in that at least one elastic insert (17a to 17e) of PU-foam fills over an axial partial length of the torsion spring (7) a circular ring shaped space (16, 19) which is radially defined by a portion of the housing (2) and the torsion spring (7).

2. (Original) Tensioner according to claim 1, characterized in that the insert (17a) is placed in the space (16) which is radially defined by the bearing receptacle (6) and the torsion spring (7).

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3. (Original) Tensioner according to claim 1, characterized in that the insert

(17b) is placed in the space (19) which is defined by the torsion spring (7)

and an inner wall of the housing (2).

4. (Original) Tensioner according to claim 1, characterized in that the tensioner

(1) includes two inserts (17a, 17b) for placement in the spaces (16 and 19).

5. (Original) Tensioner according to claim 1, characterized in that the insert

(17a, 17c, 17d) is so placed as to realize a radial overlap between the outer

diameter of the bearing receptacle (6) and the inner diameter of the insert

(17a, 17c, 17d).

6. (Original) Tensioner according to claim 1, characterized in that an outer

diameter of the insert (17a, 17b, 17c, 17d) exceeds the inner diameter of the

torsion spring (7) in installed state.

7. (Original) Tensioner according to claim 1, characterized in that in the

installation state, the inner diameter of the insert (17b) is smaller than the

outer diameter of the torsion spring (7).

8. (Original) Tensioner according to claim 1, characterized by a tubular insert

(17a, 17b) placed in the tensioner (1).

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9. (Original) Tensioner according to claim 1, characterized by a tubular insert

(17c, 17d) which, when viewed in half-section, has a U-shaped profile with

walls substantially in parallel relationship.

10. (Original) Tensioner according to claim 9, characterized in that the walls

(21, 22) of the insert (17c, 17d) have different lengths.

11. (Original) Tensioner according to claim 9, characterized in that the wall (24)

of the insert (17d), resting against the torsion spring (7), is provided with at

least one elongate slot (24).

12. (Original) Tensioner according to claim 9, characterized in that the insert

(17c, 17d) circumscribes in an installation position with the shorter wall (22)

the outer surface area of the bearing receptacle (6).

13. (Original) Tensioner according to claim 9, characterized in that the insert

(17c, 17d) is supported in an installation position with the wall (21) by a mid-

section "M" of the torsion spring (7).

14. (Original) Tensioner according to claim 1, characterized by an insert (17e)

which is so positioned upon the bearing receptacle (6) that their calotte-

shaped outer contour is supported with an equatorial plane upon the inside

of the torsion spring (7).

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- 15. (Original) Tensioner according to claim 1, characterized in that the axial length of the insert (17a) at least corresponds to the distance of three windings of the torsions spring (7) in installed state.
- 16. (Original) Tensioner according to claim 3, characterized in that the insert (17b) fixed in place in a ring groove (20) of the housing (2) embraces the outside of the torsion spring (7).
- 17. (Currently amended) Tensioner according to claim 1, characterized in that the insert (17a) is non-detachable fixed in place upon the bearing receptacle (6) in the area of a contact surface (18)[[, in particular by gluing]].

18. (Canceled)

- 19. (Currently amended) A tensioner for a traction drive, comprising:
 - a housing having an interior space;
 - a swivel arm, mounted on an axle which is guided by an inner housing wall,
 - for supporting a rotatable tension roller interacting with the traction drive;
 - a torsion spring disposed in the interior space between the housing and the
 - swivel arm for loading the swivel arm to seek an end position;
 - a friction disk connected to the swivel arm and urged in forced engagement
 - with the housing for realizing a dampened adjusting movement; and
 - at least one elastic insert made of PU foam and received in the interior

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space between the torsion spring and a confronting surface of the inner housing wall and extending over an axial partial length of the torsion spring.

20. (Previously presented) The tensioner of claim 19, wherein the insert is placed between an inside area of the torsion spring and the inner housing wall.

21. (Previously presented) The tensioner of claim 20, and further comprising a second said insert placed in the interior space between an outside of the torsion spring and a confronting surface of an outer housing wall.

22. (Previously presented) The tensioner of claim 19, wherein the insert has an inner diameter which is smaller than an outer diameter of the inner housing wall.

- 23. (Previously presented) The tensioner of claim 19, wherein the insert has an outer diameter is greater than an inner diameter of the torsion spring.
- 24. (Previously presented) The tensioner of claim 19, wherein the insert has an inner diameter which is smaller than an outer diameter of the torsion spring.
- 25. (Previously presented) The tensioner of claim 19, wherein the insert has a tubular configuration.

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26. (Previously presented) The tensioner of claim 25, wherein the insert, when

viewed in half-section, has a U-shaped profile with walls substantially in

parallel relationship.

27. (Previously presented) The tensioner of claim 26, wherein the walls of the

insert have different lengths.

28. (Previously presented) The tensioner of claim 26, wherein one of the walls

of the insert rests against the torsion spring and is provided with at least one

elongate slot.

29. (Previously presented) The tensioner of claim 26, wherein one of the walls

of the insert is shorter and circumscribes an outer surface area of the inner

housing wall.

30. (Previously presented) The tensioner of claim 26, wherein one of the walls

of the insert rests in a mid-section against the torsion spring.

31. (Previously presented) The tensioner of claim 20, wherein the insert has a

calotte-shaped outer contour and defines an equatorial plane resting against

the inside area of the torsion spring.



- 32. (Previously presented) The tensioner of claim 19, wherein the insert has an axial length which at least corresponds to a distance of three windings of the torsions spring.
- 33. (Previously presented) The tensioner of claim 21, wherein the second insert is received in an inner ring groove of the outer housing wall.

34. (Previously presented) The tensioner of claim 19, wherein the insert is nondetachable fixed to the inner housing wall.

35. (Previously presented) The tensioner of claim 19, wherein the insert is glued to the inner housing wall.

Claims 36, 37 (Canceled).

- 38. (New) Tensioner according to claim 1, characterized in that the insert has one portion to bear against the housing and another portion to bear against the torsion spring.
- 39. (New) Tensioner according to claim 17, characterized in that the insert (17a) is glued upon the bearing receptacle (6) in the area of a contact surface (18).



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40. (New) The tensioner of claim 19, wherein the insert has one portion to bear against the housing and another portion to bear against the torsion spring.

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AMENDMENTS TO THE DRAWINGS WITHOUT MARKINGS

IN THE DRAWING:

Fig. 1 has been amended

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REMARKS

The last Office Action of August 14, 2003 has been carefully considered.

Reconsideration of the instant application in view of the foregoing amendments

and the following remarks is respectfully requested.

Claims 1 to 37 are pending in the application. Claims 1, 17, and 19 have

been amended. Claims 18, 36, and 37 have been canceled. Claims 38-40 have

been added. No fee is due.

It is noted that the drawings are objected to because of applicant's failure

to show every feature set forth in the claims. Drawing proposals showing the

required changes are submitted herewith together with a communication to the

draftsman.

It is further noted that claims 1-18 are rejected under 35 U.S.C. §112.

second paragraph, as being indefinite for failing to particularly point out and

distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 5-8, 15, 17-20, 22-25, 32, and 34-37 stand rejected under

35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,702,314 to Schmid.

Claims 3, 4, 16, 21, and 33 stand rejected under 35 U.S.C. §103(a) as

being unpatentable over Schmid in view of U.S. Pat. No. 5,803,849 to Ayukawa.

Claims 9-13, and 26-30 stand rejected under 35 U.S.C. §103(a) as being

unpatentable over Schmid in view of Japanese Pat. No. 1320367.

It is noted with appreciation that claims 14 are indicated allowable if

rewritten in independent form to overcome the rejection under 35 U.S.C. §112

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and to include all of the limitations of the base claim and any intervening claims.

It is also noted with appreciation that claims 31 are indicated allowable if

rewritten to include all of the limitations of the base claim and any intervening

claims. However, applicant wishes to defer amendments to these dependent

claims in view of the arguments presented below regarding amended claims 1

and 19.

OBJECTION TO THE DRAWING

Applicant submits herewith a new Fig. 1 to show the tension roller, labeled

by reference numeral 28. The specification has been amended to make it

consistent with the amendments to the drawing. No new matter has been added.

Withdrawal of the objection to the drawing is thus respectfully requested.

REJECTION CLAIMS 1-18 UNDER 35 U.S.C. §112,

PARAGRAPH

Applicant has amended claims 1 and 17 to address the objection by the

Examiner. A new claim 39 has been added to set forth subject matter deleted

from claim 17. Claim 18 has been canceled.

Withdrawal of the rejection of the claims 1-18 under 35 U.S.C. §112,

second paragraph is thus respectfully requested.

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REJECTION UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY SCHMID

Applicant has amended claims 1 and 19 by setting forth that the insert is

made of PU foam, as previously recited in claims 18 and 37, respectively.

Claims 18, 36, and 37 have now been canceled.

The present invention, as set forth in claims 1 and 19, now on file, is

directed to a tensioner which includes an elastic insert made of a plastic material,

namely PU foam, and so configured to fill a radial space between the housing

and the torsion spring. In other words, the insert is constructed to bridge this

radial space and thus to bear upon the housing and the tension spring, whereby

the use of PU foam is desirable because it has sufficient wear resistance and

effectively dampens vibrations of the torsion spring. Reference is made to

paragraph [0020] of the instant specification.

Applicant also submits herewith new claims 38 and 40 to specifically set

forth the contacting relationship of the insert with the housing and the torsion

spring to thereby bridge the radial distance between the housing and the torsion

spring.

The Schmid reference describes a tensioner which includes a slotted

tension bush (20) to bear against the inner periphery of the torsion spring,

whereby the tension bush is constructed under tension to seek the contact with

the torsion spring (col. 3, lines 26-30). As clearly shown in the Figure, the tension

bush is placed at a radial distance to the housing and thus, unlike the insert of

the present invention, does not fill or bridge the radial space between the housing

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and the tension spring. In addition, Schmid fails to teach or suggest the use of

PU foam as material.

For the reasons set forth above, it is applicant's contention that Schmid

neither teaches nor suggests the features of the present invention, as recited in

claims 1 and 19.

As for the rejection of the retained dependent claims, these claims depend

on claims 1 and 19, respectively, share their presumably allowable features, and

therefore it is respectfully submitted that these claims should also be allowed.

Withdrawal of the rejection under 35 U.S.C. §102(b) is thus respectfully

requested.

REJECTION UNDER 35 U.S.C. §103(a)

As a consequence of the incorporation of the subject matter of claim 18 in

claim 1 and incorporation of the subject matter of claims 37 in claim 19, the

rejection under 35 U.S.C. §103(a) becomes moot.

Withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of

claims 1-17, 19-35, 18-40 are thus respectfully requested.

CONCLUSION

Applicant believes that when the Examiner reconsiders the claims in the

light of the above comments, he will agree that the invention is in no way properly

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met or anticipated or even suggested by any of the references however they are

considered.

Reconsideration and allowance of the present application are respectfully

requested.

Should the Examiner consider necessary or desirable any formal changes

anywhere in the specification, claims and/or drawing, then it is respectfully

requested that such changes be made by Examiner's Amendment, if the

Examiner feels this would facilitate passage of the case to issuance. If the

Examiner feels that it might be helpful in advancing this case by calling the

undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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Date: November 14, 2003

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